

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.]
09/544,613	09/544,613 04/06/2000		Jean-Claude Jammet	ATOCH-172	9063	•
23599	7590	03/10/2003				
			RANIGAN, P.C.	EXAMINER]
2200 CLARE SUITE 1400				RHEE, JANE J		
ARLINGTO	N, VA 22	2201		ART UNIT	PAPER NUMBER	114
				1772		, , ,
				DATE MAILED: 03/10/2003	,	

Please find below and/or attached an Office communication concerning this application or proceeding.

			A-S-1
•	Application No.	Applicant(s)	
Office Action Summany	09/544,613	JAMMET ET AL.	
Office Action Summary	Examiner	Art Unit	
The MAILING DATE of this communication app	Jane J Rhee	1772	188
Period for Reply	Jears on the Cover shee	with the correspondence addre	33
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period of a Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may within the statutory minimum of will apply and will expire SIX (6) to cause the application to become	y a reply be timely filed thirty (30) days will be considered timely. MONTHS from the mailing date of this comme ABANDONED (35 U.S.C. § 133).	unication.
1) Responsive to communication(s) filed on <u>09 L</u>	December 2002		
	is action is non-final.		
3)☐ Since this application is in condition for allowa		matters, prosecution as to the n	nerits is
closed in accordance with the practice under Disposition of Claims			
4) Claim(s) 10-22 is/are pending in the application	on.		
4a) Of the above claim(s) is/are withdraw	wn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>10-22</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	r election requirement.		
Application Papers	_		
9) The specification is objected to by the Examine10) The drawing(s) filed on is/are: a) accept		w the Everniner	
Applicant may not request that any objection to the			
11) The proposed drawing correction filed on			
If approved, corrected drawings are required in re		- ,	
12) The oath or declaration is objected to by the Ex	•		
Priority under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.	C. § 119(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:			
1. Certified copies of the priority document	s have been received.		
2. Certified copies of the priority document	s have been received i	n Application No	
Copies of the certified copies of the prior application from the International Bu See the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	age
14) ☐ Acknowledgment is made of a claim for domesti	•		plication).
a) The translation of the foreign language pro	ovisional application ha	s been received.	,
Attachment(s)	. •		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice	ew Summary (PTO-413) Paper No(s). of Informal Patent Application (PTO-1	

Art Unit: 1772

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claims 10-15, 17-22 are rejected under 35 U.S.C. 102(b) as being unpatentable by Nagano et al. (0035392).

Nagano et al. discloses a polymer (A) comprising a blend of polyethylene (page 4 lines 5-12) with a density of 0.88 to 0.98g/cm³ (page 4 line 11-12) being grafted with an unsaturated carboxylic acid in which the content is between 0.01 to 10% (page 4 line 22-24). Nagano et al. discloses a polyethylene (B) with a density of 0.86 to 0.96g/cm³ (page 4 line 18). Nagano et al. discloses that the comonomer of A1 is the same as that of B, which is the polyethylene, described above (page 4 lines 5-19). Nagano et al. discloses that the binder comprises an ethylene content of not less than 80 mole% (page 4 line 20-21) and has an MFI₂/[η]^{-8.77} ratio greater than 15 in absolute value (page 4 line 10-11). Nagano et al. discloses the MFI₁₀/MFI₂ ratio being between 5 to 18 (page 4 line 27). Nagano et al. discloses a multilayer structure comprising a layer comprising the binder of described above directly attached to the latter a layer of nitrogencontaining or oxygen-containing polar resin or a metal layer (page 12 lines 20-24).

Art Unit: 1772

gasoline tank (page 16 line 13). Nagano et al. discloses that the layer of nitrogen containing or oxygen containing polar resin is a saponified ethylene-vinyl acetate copolymer (page 12 lines 25-34). Since Nagano et al. discloses the same layers desired by the applicant with the same density and MFI ratio it is inherent that the MFI is between 0.1 and 3g/10min.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Adur et al. (4460745).

Nagano et al. discloses a multilayer structure comprising the binder described above with a layer of nitrogen-containing or oxygen-containing polar resin directly attached (page 12 lines 20-24). Nagano et al. discloses that the structure comprises an HDPE layer as the first layer, then a polar resin layer as the second layer and a HDPE layer (page 14 line 9-10). Nagano et al. discloses that the polar resins can be polyamide resins, saponified copolymer of ethylene and vinyl acetate, and polyesters (page 12 lines 25-27). Nagano et al. fail to disclose a layer of EVOH as the polar resin layer. Adur et al. teaches that the polar substrates which can be used with adhesive blends are nylons and other polyamides, ethylene vinyl alcohol copolymers, EVA (col. 2

Art Unit: 1772

line22), polyesters, polyvinyl alcohol, polyurethanes, polyureas, and other carbonyl-containing polymers, metal, glass, paper, wood and the like (col. 1 lines 56-62). Adur et al. teaches that it is well known in the art to use composites such as EVOH to adhesive blends because the adhesive blends provides excellent adhesive strength to polar resin layers like EVOH (col. 1 lines 56-59). Therefore, it would have been obvious to one of ordinary skill in the art to have provided Nagano et al. with a layer of EVOH as the polar resin layer blends because the adhesive blends provides excellent adhesive strength to polar resin layers like EVOH (col. 1 lines 56-59) as taught by Adur et al.

Response to Arguments

3. Applicant's arguments filed 12/9/02 have been fully considered but they are not persuasive.

In response to applicant's argument that Nagano et al. does not teach the grafting of A(1) and A(2), Nagano et al. discloses a polymer (A) comprising a blend of polyethylene (page 4 lines 5-12) with a density of 0.88 to 0.98g/cm³ (page 4 line 11-12) being grafted with an unsaturated carboxylic acid in which the content is between 0.01 to 10% (page 4 line 22-24). Applicant claims a polymer (A) comprising (A1) and (A2) and furthermore a polyethylene (B). Polymer (A) which comprises (A1 and A2) and the polyethylene (B) are all considered to be Nagano et al's (Ai). Since A1, A2, and B all consist of a polyethylene with a relative density of between 0.910-0.940 an ethylene content of not less than 80 mole% and has an MFI₂/[η]^{-8.77} ratio greater than 15 in absolute value, A1, A2 and B are considered to be the same polyethylene. Therefore,

Art Unit: 1772

Nagano et al. does teach that A1 and A2 are both grafted because A1 and A2 are considered to be Nagano et al's Ai, and Nagano et al's Ai is a graft modified ethylene (page 4 line 5).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 703-605-4959. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Art Unit: 1772

Page 6

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jane Rhee March 6, 2003 SUPERVISORY PATENT EXAMINER

ER 3/6/03